BELLSOUTH

ORIGINAL

BellSouth
Suite 900
1133-21st Street, N.W.
Washington, D.C. 20036-3351

kathleen.levitz@bellsouth.com

June 20, 2001

RECEIVED

JUN 2 0 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Kathleen B. Levitz
Vice President-Federal Regulatory

202 463-4113
Fax 202 463-4198

<u>WRITTEN EX PARTE</u>

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals
445 12th St. S.W.
Washington, DC 20554

<center>Re: CC Docket No. 99-200
CC Docket No. 96-98</center>

Dear Ms. Salas:

Attached is a cost study showing the costs BellSouth has already incurred and will incur to implement Thousand Block Pooling. The cost study covers the period from 2000 to 2006 and shows actual costs incurred for year 2000 and projected costs for the years 2001-2006. BellSouth is making this filing in response to a Commission request for such cost studies that appeared in ¶182 of the *Second Further Notice of Proposed Rulemaking* in CC Docket No. 99-200.

As required by Section 1.1206(b)(1) of the Commission's rules, I am filing two copies of this notice and ask that you place this notification in the record of the proceeding identified above. Thank you.

Sincerely,

Kathleen B. Levitz

Kathleen B. Levitz

Attachment
cc: Glenn Reynolds
       Diane Harmon
       Sanford Williams
       Cheryl Callahan
       Jane Jackson
       Richard Lerner
       Tamara Preiss

COST DEVELOPMENT

Introduction and Overview

The purpose of this cost study is to identify the costs associated with implementing Telephone Number Pooling (TNP) in the BellSouth Region in accordance with Federal Communications Commission (FCC) Numbering Resource Optimization (CC Docket No. 99-200) and Further Notice of Proposed Rule Making (FCC 00-104) orders. At the time the study was initiated, only the state of Florida had ordered TNP. This required the development of an assumption set in order to estimate the pooling costs in the remaining states since many of the TNP costs are regional (i.e. Operations Support Systems, staff support, National Pooling Administrator). The major assumptions were:

1) All costs will be recovered at the Federal level,
2) The state of Florida ordered pooling in four Numbering Plan Areas (NPAs) beginning in January 2001,
3) NPAs in the top 100 Metropolitan Statistical Areas (MSAs) would be implemented first,
4) Beginning in the third quarter of 2001, three NPAs will be implemented per quarter, ,
5) All BellSouth states will have at least one NPA pooling by 2003.

The cost methodology identified is the total direct long run incremental costs plus a reasonable allocation of shared and common costs. The study recovers the costs incurred during the period beginning January 1, 2000 and ending December 31, 2006. Present Value (PV) calculations are based on an 11.25% rate, which has been used in other FCC filings such as BellSouth's Local Number Portability filing dated June 11, 1999. An Excel spreadsheet is used for all calculations.

Actual costs, based on TNP tracking reports, vendor agreements, and expense vouchers, are used for year 2000. Amounts from January 1, 2001 to December 31, 2006 are estimated. The TNP cost components in this study are separately identified as capital and expense and further as either fully recoverable direct or joint. These cost components are categorized as: 1) Network related capital and expenses, 2) Block Assignment Center capital and expenses, 3) Operation Support Systems (OSS) capital and expenses, 4) Miscellaneous Employee related and 5) Cost Savings from the deferral of NPA splits and overlays. Fully recoverable capital and expenses items defined as joint are allocated based on supplied allocation factors developed by the respective subject matter experts (SMEs) for Network. The resulting allocated amounts are directly attributable to TNP. Labor cost were estimated by multiplying work times by pay grade and/or wage scale by the appropriate BellSouth regional 2000 to 2006 levelized directly assigned labor rate per hour.

As stated earlier, this study contains the direct cost of implementing TNP. Thus, these costs would not have incurred except for the implementation of TNP. Forward-looking shared and common costs are also considered. The shared costs are costs incurred to

1

Introduction and Overview (continued)

produce a family of products and are not direct costs of any member of the family. These costs include expenses such as Plant Operations Administration Expense, General Engineering Expenses, and Motor Vehicles. Common costs include costs, which span the activities of the business, such as general and administrative, executive and planning, accounting and financial, and legal. BellSouth developed factors that represent a distribution of shared and common costs. The methodology employed to develop the TNP shared and common cost factors is the same process employed in developing shared and common cost factors for unbundled network elements (UNEs). The UNE shared factor for buildings was 0.0001 and Digital Electronic Switching (377C) was 0.0167. The UNE common factor was 0.0624. BellSouth adjusted the UNE shared and common cost factors to exclude costs, such as product management and general-purpose computer hardware and software costs, that are identified as direct costs in the TNP cost study. The TNP shared factor for buildings is 0.0001 and Digital Electronic Switching is 0.0131. The TNP common cost factor is 0.0424. The TNP specific factors are applied to the total direct costs to derive the forward-looking shared and common cost loadings.

Description of Cost Categories

Below are summaries of the various TNP cost categories. In the FCC's Report and Order and Further Notice of Proposed Rule Making (FCC 00-104, Paragraph 216, Page 99) released March 31, 2000, carriers were instructed to assign costs according to three categories: 1) shared industry costs, 2) carrier-specific costs directly related to thousands-block number pooling, and 3) carrier-specific costs not directly related to thousands-block number pooling. The carrier-specific costs reflected in this study are network capital and expenses, operational support systems capital and expenses, and employee related and other expenses. BellSouth utilized the same "but for" criteria used in the number portability proceedings as specified in above order (FCC 00-104, Paragraph 218, Page 100) in order to identify carrier specific costs directly related to thousands-block number pooling. Under this "but for" test, costs are eligible for recovery only if they satisfy the following two requirements: 1) the cost would not have been incurred by the carrier "but for" the implementation of thousands-block number pooling; and 2) the costs were incurred "for the provision of" thousands-block number pooling. Also included as a cost category are the savings from deferring the deployment of NPA splits and overlays.

Network Capital and Expense

The network related capital and expenses are identified as fully recoverable direct and joint. The fully recoverable capital and expenses are included in their entirety in the study. Capital and expense items defined as joint are allocated based on supplied allocation factors developed by BellSouth SMEs for Network.

BellSouth incurs additional call processing and changes to routing logic with thousands-block pooling. The Service Package Application (SPA) is software installed on BellSouth's Service Control Points (SCPs) to provide routing instructions to the central

6/13/2001

Network Capital and Expense (continued)

office switch. The logic required for thousands-block number pooling is distinct from and not included in the existing porting and default routing logic. The call processing hierarchy requires the following determination: first, whether a number is ported; second, if that number is ported, whether the number is also pooled; and third, if the number is neither ported nor pooled, whether to default route the call. Bellsouth considers the costs associated with this modification to be "directly related" and fully recoverable.

Providing TNP requires BellSouth to perform feature upgrades to its switches. This TNP feature software is used solely for the purpose of providing TNP and thus is directly related to the provisioning of TNP. TNP switch requirements include the need to denote an unallocated directory number or a range of directory numbers so that calls routed to these numbers will not receive error treatment.

BellSouth will incur both hardware and software costs that are only partially related to the provision of TNP (i.e. joint costs). The Report and Order and Further Notice of Proposed Rule Making (FCC 00-104, Paragraph 221, Page 100) defines joint costs as "incremental costs associated with new investments or expenses that directly support thousands-block number pooling and also support one or more non-numbering functions.

BellSouth will upgrade its SCPs for the purpose of providing TNP. These SCPs house the database that contains routing information for ported and now pooled numbers. A SCP receives the called number in a query from a Service Switching Point (SSP) and responds with routing instructions that enable the SSP to complete the call. The query and the resulting routing instructions travel over the Common Channel Signaling Network. SCPs will be upgraded with Model 2+ processors to provide sufficient Central Processors Unit (CPU) capacity to serve pooling query demand as a result of the increased cycle time required to process TNP queries. The costs associated with theses hardware and software modifications are fully recoverable joint costs. A special study was conducted which identified the percentage of the processor capacity utilized by TNP and only that portion was allocated to TNP. Since the SCPs in the test laboratory must match the field configuration, those SCPs were also upgraded. The length of time to test TNP routing in the laboratory to total available testing time was used as the allocation factor for assigning a portion of the laboratory SCP processor upgrade to TNP.

BellSouth routinely upgrades switch hardware (i.e., processors and communications modules) and base operation system software. In order to provide TNP, the timing of these upgrades was advanced in some offices. Accordingly, the costs incurred to advance these upgrades are directly related costs and thus, are included in the cost study.

The BellSouth Number Portability Administration Center (NPAC) Interface System serves as the interface between NPAC, the internal-BellSouth Operation Support Systems (OSS), and the Competitive Local Exchange Company (CLEC) interface systems that currently support LNP. The TNP enhancements will support NPAC and Pooling Administrator processes that allocate NPA-NXXs at the thousands-block level within rate

Network Capital and Expense (continued)

centers. These enhancements would not have been incurred but for the implementation of number pooling and therefore are carrier-specific costs directly related to TNP.

Block Assignment Center (BAC) Capital and Expense

A new center has been established that will be responsible for the administration of all number issues related to number pooling. The center's responsibilities will include: inventory of contaminated and uncontaminated one thousand blocks of numbers to be donated, donation dates, assessment of inventory (months to exhaust), retention of a six-month inventory, utilization information of those NPA-NXXs in service within BellSouth, and other similar tracking functions. The center will also provide the interface between the Pool Administrator and the various BellSouth OSS. Since these costs would not have been incurred "but for" the implementation of thousands-block number pooling; and the costs were incurred "for the provision of" thousands-block number pooling, BellSouth considers them TNP related costs.

OSS Capital and Expense

The implementation of thousands-block telephone number pooling requires fundamental changes to every OSS that relies on the NXX portion of the 10-digit North American Numbering Plan (NANP) telephone number as a primary data source. Attachment B identifies the OSS system by functionality (e.g., preordering, ordering, provisioning, billing) and describes the system changes necessary to implement TNP. Telcordia system modifications can be provided if necessary. The system enhancements, including Right-To-Use Fees and expenses would not have been incurred but for the implementation of number pooling and therefore are carrier-specific costs directly related to number pooling. Capital costs were also incurred and are considered as directly related joint costs since the various systems will share the equipment with Number Pooling.

BellSouth must also modify its Advanced Intelligent Network - Service Management System (AIN-SMS) in order to implement TNP. The AIN-SMS receives the ported and /or pooled number information broadcasted from the NPAC (via the BellSouth Gateway), processes that information and downloads it to the appropriate SCP. The upgrade provides the capability to distinguish a pool query and provides the database efficiency of representing a thousands-block as a single record and are directly attributable to number pooling.

Changes to the 911 database are required to modify existing logic on how update records are processed to identify both "ownership " and "911 Geographic area" of the subscriber information. The RTU fees and expenses for these modifications are directly related to TNP.

4

Miscellaneous Employee Related

BellSouth has employees dedicated to projects required for the implementation of TNP. The labor costs associated with these projects are directly related to TNP. Provided below is a brief description of the various categories.

Translations - Labor to perform translations for the provision of TNP feature software.

Network Infrastructure - Labor cost for employees dedicated to network infrastructure planning and implementation. These employees are responsible for ensuring that all aspects of TNP, including network hardware and software upgrades, are properly designed and implemented.

Project and Administrative Management - BellSouth has employees and independent contractors to perform TNP functions including project management, business planning, field support and implementation.

Training - Training will be provided to all center employees (i.e. residence and business repair center) impacted by thousands-block number pooling.

Cost Savings from the Deferral of NPA Splits and Overlays

As requested in the Report and Order and Further Notice of Proposed Rule Making (FCC 00-104, Paragraph 215, Page 98) carriers were instructed to include the potential cost savings resulting from thousand-block number pooling. The assumptions used to identify the NPAs that polling would be implemented were also the basis of deferrals of NPA splits or overlays. It was estimated that pooling would delay the need for a NPA split or overlay by three years. Although the final decision of whether a split or overlay will be implement resides with the individual state commissions, it was assumed that 75% of the relief of NPAs would be in the form of a split. Since a split or overlay would ultimately occur, the savings were estimated to be difference in the cost of the split or overlay with number pooling and without pooling. The cost components associated with both splits and overlays are: OSS modifications, central office translations, and customer notifications.

DESCRIPTION OF ATTACHMENTS AND WORKPAPERS

Following is a description of each of the attachments and workpapers contained in this study.

Summary of CO Driven & Volume Insensitive Costs: This workpaper provides total costs by NPA-driven costs, which are dependent on the number of central office switches that are made TNP-capable and fixed costs, which include all the OSS and other regional type costs.

6/13/2001

DESCRIPTION OF ATTACHMENTS AND WORKPAPERS (continued)

Summary of Non Present Value Cost: This workpaper list costs by Field Reporting Code (FRC).

Factors – Capital: This workpaper contains factors, loadings and miscellaneous inputs associated with the Capital related inputs.

Factors – Expense: This workpaper contains the cost of money and years to advance used with expense inputs.

Restated - Inputs: This workpaper categorizes and summarizes the SME Inputs to the FRCs being studied.

WP Capital: This workpaper shows the Capital investments calculations applying the allocation factors and Annual Cost Factors to each area studied to provide costs for each FRC.

WP Expense: This workpaper shows the calculations to provide the Expense associated with Number Pooling.

Other Labor Costs: This workpaper calculates the costs associated with the translations provisioned in each type switch and the project management of the Number Pooling efforts.

Translations Expense: The workpaper calculates the labor expenses of translation work to equip the central offices for Number Pooling.

Savings: This workpaper calculates saving of deferment of NPA splits and overlays due to Number Pooling.

SME - Inputs: This workpaper provides the inputs from the various groups involved in the provisioning of Number Pooling.

Attachment A: This attachment provides a list of assumptions used to implement TNP.

Attachment B: This attachment list the Operation Support Systems effected by TNP and what was required to modify the system to implement TNP.

COST CALCULATIONS

There are three basic calculations performed based on the FRC: 1) Network Capital (377C), 2) General Purpose Computer (530C/630C), and 3) Network RTU (560C) and General Purpose Computer RTU (460C).

6/13/2001

COST CALCULATIONS (continued)

The inputs associated with Network Capital (377C) are vendor engineered, furnished, and installed prices. These vendor prices are first brought up to investment level by multiplying by the associated 377C Inflation, Telco, and Support Equipment and Power factors. To recover a proportional share of land (20C) and building (10C) for each dollar of network investment, a land and building loading factors for 377C is used. Next, the investments (377C, 20C & 10C) are converted to annual cost. This is accomplished by multiplying the investments by their associated Depreciation, Cost of Money, Plant Specific Maintenance, and Ad Valorem annual cost factors. The annual costs over the equipment's economic life are summed to produce a total for each year in the study. Also included in this step is the inclusion of shared and common cost by multiplying the annual cost by the appropriated shared and common cost factor. The total annual costs plus shared and common are summed to produce a total cost for the category.

General Purpose Computer (530C/630C) equipment prices can be multiplied by the annual cost factors directly. Land and building are the only loading factors applied to 530C. The annual costs over the equipment's economic life are summed to product a total costs for each year equipment was placed. Also included in this step is the inclusion of shared and common cost by multiplying the annual cost by the appropriated shared and common cost factor. The total annual costs plus shared and common are summed to produce a total cost for the category. The joint cost 630C equipment is first multiplied by the allocation factor to determine the TNP related amount and then it is handled the same as the other capital cost items.

Network RTU (560C) and General Purpose Computer RTU (460C) do not require any loadings and are multiplied by the annual cost factors for the associated FRC account. Also as described previously, annual costs over the category's economic life are summed to produce a total for each year RTU fees were paid. RTU fees do not have shared cost and only common cost factors were applied to the annual costs. The total cost plus common costs are summed to produce a total for the category.

Expenses plus common costs for each year in the study are just summed. Any deviation from these procedures will be explained in the individual cost category.

Network Capital and Expense

The actual capital and expenses for 2000 were combined with a forecast of annual capital and expense for the period 2001 – 2006. The associated Field Reporting Code (FRC) was also identified for item of capital.

Since BellSouth Science and Technology personnel wrote the enhancement to the SPA software, the value of the software was determined by multiplying the time required to write the software by the levelized labor rate of the personnel performing the work. This volume insensitive amount is considered 460C and is capitalized.

6/13/2001

Network Capital and Expense (continued)

The Number Pooling feature software (FRC 560C) is one of the variable cost components. This cost is dependent on the number of offices TNP is implemented. For the purposes of this study, the implementation dates and offices are based on the assumptions in Attachment A.

Since the SCPs (FRC 377C), both field and lab, were joint cost items, as previously explained, the vendor prices were first multiplied by an allocation factor to determine the amount to be assigned to TNP. The allocated amounts were brought up to an investment level by the using the process provided above. These costs were considered volume insensitive since the Local Number Portability SCPs are placed at the gateway Signal Transfer Point (STP) sites, which are distributed geographically throughout the region.

In order to implement TNP and to fulfill the assumptions on Attachment A, certain switch generics (FRC 377C) were required from one to two years sooner than the planned implementation dates. To determine the cost penalty associated with this advancement, the difference between two cost streams was calculated. The present value of annual cost of the generic was calculated for the year the generic was implemented and also for the originally planned year. Then the planned costs were present valued to the year the implementation actually occurred and subtracted from the costs for the generic when it was actually implemented. The difference is the cost of advancement. These are volume sensitive costs since they are dependent of the number offices in which TNP is implemented and advanced.

The modifications to the NPAC interface required both software (FRC 460C) and expense type expenditures. These are volume insensitive or fixed costs.

Block Assignment Center (BAC) Capital and Expense

The establishment of the Block Assignment Center required 1) building capital (FRC 10C) and expenses, 2) General Purpose Computer capital (530C), software (460C), and expenses, and 3) labor expenses. The building capital is treated as indicated above. These cost are considered volume insensitive. Item 3, however, was included in the calculations for the employee related cost section.

OSS Capital and Expense

Capital (530C), Right-To-Use fees (460C) and expenses required for modifying the BellSouth OSSs were considered as volume insensitive costs. The capital (530C) is also a joint costs. The amount of the costs allocated to TNP was multiplied by a SME provided factor and then handled as previously described.

8

Miscellaneous Employee Related

The hours by Job Grade or Wage Scale to perform the various functions below are multiplied by the 2000 to 2006 associated BellSouth levelized labor rate to determine the labor expenses for the indicated year.

Translations – The cost are considered variable or volume sensitive since they are dependent on the number of offices TNP is implemented.

Network Infrastructure- This cost category is fixed since only one contract employee was involved.

Block Assignment Center - The labor costs of this center are considered fixed for the purposes of this study.

Project and Administrative Management- The BellSouth employees dedicated to project management, business planning and field support were identified and included in this category, which are consider fixed costs.

Training-The various centers that were impacted by thousands-block pooling required TNP related training. Contract employees handled these functions, which were considered as fixed costs.

Cost Savings from the Deferral of NPA Splits and Overlays

Two scenarios were considered. One in which TNP is implemented and one in which only NPA splits or overlays were used to provide relief. Based on the TNP deployment assumptions, the costs for either a NPA split or overlay was assigned a year with and without TNP. The costs for both scenarios were then valued at June 30, 2001. Then, the cost for an NPA split or overlay with TNP was subtracted from the cost without TNP for each NPA. The resulting savings for each NPA were summed to provide a total savings associated with implementing TNP. These savings were subtracted from the final cost calculation.

FCC Cost Study Assumption Set

Assumptions:

1. This schedule will be based on top 100 MSAs within the US. Pooling will be implemented in 3 NPAs per quarter within the BellSouth region.
2. For study purposes, FCC cost study will assume that all costs are recovered at the Federal level.
3. All BellSouth states have at least one NPA pooling by 2003.
4. National cost recovery for number pooling will be done over a five-year period.
5. National cost recovery mechanism for number pooling will be modeled after the LNP cost recovery mechanism

For FCC Cost Study Assumptions Only

January, 2001	Fort Lauderdale, FL	954	In Top 100 MSA
February, 2001	West Palm Beach, FL	561	In Top 100 MSA
April, 2001	Jacksonville, FL	904	In Top 100 MSA
2nd Quarter 2001	Nashville, TN	615	In Top 100 MSA
	Keys, FL	305	Not top 100 MSA
3rd Quarter 2001	Memphis, TN	901	In Top 100 MSA
	Daytona, FL	904	In Top 100 MSA
	Raleigh, NC	919	In Top 100 MSA
	Fort Pierce / St. Lucie	561	Not top 100 MSA
4th Quarter 2001	Miami, FL	305	In Top 100 MSA
	Atlanta, GA	678/770	In Top 100 MSA
	New Orleans, LA	504	In Top 100 MSA

I

1st Quarter 2002	Tampa FL	813	In Top 100 MSA
	Orlando, FL	407	In Top 100 MSA
	Knoxville, TN	423	In Top 100 MSA
2nd Quarter 2002	Jackson, MS	601	Not top 100 MSA
	Charlotte, NC	704	In Top 100 MSA
	Baton Rouge, LA	225	In Top 100 MSA
3rd Quarter 2002	Greenville SC	864	In Top 100 MSA
	Mobile, Al.	334	In Top 100 MSA
	Sarasota, Fl.	941 (this is not a BSL NPA)	In Top 100 MSA
4th Quarter 2002	Greensboro, NC	336	In Top 100 MSA
	Lexington, KY	606	Not top 100 MSA
1st Quarter 2003	Louisville, KY	502	In Top 100 MSA
	Charleston, SC	843	In Top 100 MSA
	Birmingham, AL.	205	In Top 100 MSA

2

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
ACCESS	Advertising Consolidated Customer Employee Support System - New system for White and Yellow Pages Publishing, Billing and Distribution	BAPCO	X	X			React to a new FID in unfielded identification section of customer service record, called TTRA
LNP TAG - Trouble Admn – GUI	Provides RRC/BRC/UNE maintenance centers with a manual interface with the LNP Gateway to send queries to the NPAC and update the AIN/SMS.	BAT				X	TAG was modified to use a new tag (Pool) in order to get the complete information on a TN. The system would now expect to return Code Owner and Block Holder information.
ARTS	Advance Routing and Trunking System - Provides NPA, NPA-NXX routing instructions to NISCs for building translations.	BST		X			Identify pooled NPA-NXX codes, associated CLLI, and each Thousands-Block assignee by OCN. Electronically notify the applicable NISC CTG of activity associated with pooled NPA-NXX codes that involve BellSouth switches.
ATLAS	The ATLAS acronym stands for Application for TN Load, Administration, and Selection. ATLAS acts as a warehouse for storing telephone numbers that are available for assignment by the negotiation systems.	BST		X			Change count of reserved number response to COSMOS/SWITCH request for reservation counts by sending data to COF (Central Office Facility) system at K block level.
BAMS	Banded Area Measured Service	BST	X	X			Updates to BAMS allowed the system to receive the Block Memorandum electronically and use the information for processing. The Block Memo provides information at the NPA NXX X level
BOCABS	System that houses CAB Loop Accounts and also Inter-exchange Carrier Accounts.	BST	X	X			Modifications were required to allow BOCABS to process the data at the NPA NXX X level versus NPA NXX.

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
BONIS (BellSouth Online NXX Information System)	BellSouth Online NXX Information System - NPA/NXX assignment inventory. BONIS issues Code Memorandums for new or changed activities on NXXs. System to verify no cross-boundary conflicts & provide feed to P/SIMS (svc reps access this data via COFFI). Generate CO Code Memo's.	BST	X				A Code Memorandum that includes the LERG assignee information will be issued for each and every CO code that is assigned for number pooling, regardless of whether the designated LERG assignee for the code is BellSouth or some other service provider.
CABS	Carrier Access Billing System - This system bills access services to customers.	BST			X		CABS now processes the billing at the NPA NXX X level. The carrier would be determined by the Block Owner versus the Code Owner
CARE	Customer Account Record Exchange - The vehicle by which our Inter-exchange carrier customers can and/or receive information on end user PIC (Preferred Inter exchange Carrier) , changes/selection and /or information relating to the end user billing account.	BST		X			All CARE processes reading and passing NPA NXX validations will need to be expanded to the 1K level (NPA NXX X)
COFFI	The Central Office Features File Interface (COFFI) is used by the service related systems, SONGS, DSAP, DOE, BOCRIS, RNS, ROS, Quantum to access information on service, features, and PIC/LPIC Carrier data.	BST	X				Obtain new data elements/sets from PSIM to COFFI interface
CRIS/BOCRIS	This system maintains all BST customer account records needed to provide customer service. BOCRIS, which is a customer record retrieval system, is a subsystem of CRIS and provides on-line random access to customer records for account inquiry use by Customer Services, Public, BellSouth Billing, Network and BAPCO.	BST	X		X		CRIS must allow the FID and code set INVU NP to process on Service Orders even though a prior CRIS record displayed a Porting Statue of normal/non-ported, Ported-In (INVU = NP), Port-back/Return to Home Switch (RTN), or Port-back/Return to Non-Home Switch (RTNN)

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
CSPS	Complex Services Profile System – On line system to support Marketing & network in the design, marketing, & provisioning of complex and digital transport services.	BST	X	X			This system updates allow the population of the correct FIDs on the service orders and the ability to distinguish pooled numbers. This allows the complex service orders to provision properly.
DOE/DSAP	Direct Order Entry/DOE Support Application - DOE is a mechanized order negotiation & generation system using screens & menus, on-line access to CRIS, on-line editing of orders and automatically generating most common order data entries.	BST	X				Negotiation system will always go to ORION to Determine and return the NPA NXX (NPA CO or TTA) of the Service Address. Need to format the Service Address NPA CO/TTA as a NPA NXX code set of the new FID TTRA.
E911	Batch process supports updating TN / Address information / provides correct routing for emergency purposes.	BST		X			When code set of "NP" is found with INVU fid, generate an update record with a function of change "M" (migrate). Modify E911 service order processing logic to determine fully spelled community name from abbreviated community name that is not dependent on NPA/NXX.
E911/Gateway	Forwards appropriate recent change messages to the appropriate E911 tandem.	BST		X			The updates to E911 gateway allowed the tables to remain current as to the location of an allocated block of numbers. Therefore, impacting routing of the E911 calls.
HAL	Hands-Off Assignment Logic - HAL mechanically handles Requests for Manual Assistance (RMAs) for the Loop Assignment Centers through terminal emmulation software. Error codes and associated TN's are provided by ATLAS to HAL. HAL then goes to COSMOS to correct the TN's there.	BST		X			Accept and process EXK and LRN FIDs from the service order S&E section. All systems accessed by HAL may require review if the systems are changing screens and /or data fields and/or location data fields.

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
LAUTO	LNP Automation - Mechanically generates LNP SO which include Trigger, Port-out orders, listing only orders CABS and CRIS loops	BST	X	X			A CRIS database conversion will take place in the future (date unknown) to change the EXK FID to the new TTRA FID on existing CSRs, but in order to capture either, LAUTO will look first for the TTRA FID in the Unfielded Section of the CSR and if the TTRA is not found, then will look for the EXK FID in the Unfielded Section of the CSR.
LEACS	LMOS Errors and Analysis Correction System – Terminal emulation for error resolution.	BST				X	Process changes required to handle different LMOS errors.
LESOG	Local Exchange Service Order Generated	BST		X			This system updates allow the population of the correct FIDs on the service orders and the ability to distinguish pooled numbers.
LNP GATEWAY	Interface between NPAC (Number Portability Administration Center) & Legacy System.	BST	X			X	Number Pooling will require LNP Gateway to first determine if an inter/intra active SV exist at the NPAC. If an active inter/intra SV does not exist, then LNP Gateway will be required to see if a Pooled SV exist at the NPAC to determine the block holder. Finding neither, LNP Gateway will query the NPAC serviceProvNPA-NXX table using the NPA-NXX of the TN in order to obtain the SPID.
MATV	Mechanized AMA Testing and Validation system automates Central Office AMA testing and validation.	BST		X			One of the solutions for NXX pooling port-in is to assign numbers by NPA/NXX/1000's.

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
MECHSO	Mechanized Service Order Generator - Mechanically generates service orders for various departments, based on the application logic and the 'trigger' file provided to the process.	BST	X				RECOGNIZE and RECAP the Number pooling FID TTRA and Code Set NPA NXX found in the Unfielded Ident Section of the CSR from CRIS.
MISOP	Mechanized Input to the Service Order Processor - MISOP is a mechanized service order generator for six systems. Each of these users have distinct requirements of MISOP in terms of service order generation. MISOP takes each of these inputs and generates a service order with entries into SONGS or DSAP.	BST	X				MISOP must recognize the following Number pooling FIDS and Code Sets: EXK, TTRA, and LRN
OM	Order Manager - Provisions the establishment & disconnection of QUICK Service lines via the service order provisioning process.	BST		X			New service order FIDs (TTRA, EXK, and LRN) will be introduced with the Number Pooling process. The OM process/files needs to be enhanced to ensure that OM recongnize and recaps the new FIDS
P/SIMS	Product Services Information Management System - P/SIMS is an on-line mechanized system that provides, at the central office switch level, current and planned service availability, tariff and inventory information for all Network Services. There are seven groups of screens supporting reports of carrier information, equal access services/features information, switch/CLLI and ONA plus lists and reports.	BST	X	X			PSIMS must recognize the following Number pooling FIDS and Code Sets: EXK, TTRA, and LRN
RIGHTTOUCH	RightTouch service is any system designed and developed to automate the customer interface by allowing eligible customers to initiate certain telephone service requests via a touch-tone phone.	BST	X				Prior to TNP, did not offer service updates to customers who ported. With TNP, we began systematically treating customers, that had always been ours, like ported numbers. Righttouch needed to be able to distinguish a TNP ported number from an LNP ported number.

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
RNS	Regional Negotiation System is a replacement for DOE/SONGS & BOCRIS for Customer Services contact personnel. RNS supports sales, ordering, billing, collections functions. In addition, RNS replaces bulky handbooks with on-line information.	BST	X				If FID EXK (floated FID/S&E) with code set value of NPA NXX appears on the customer account, RNS shall use the NPA NXX value of the EXK FID, plus the 8-character CLLI to determine feature/products & services availability and rates.
ROS	Negotiation System used by Small Business and BBS.	BST	X				Populate TTRA and its value, if one doesn't already exist:
RSAG	Regional Street Address Guide - Mechanized system which will become the corporate data layer source for address information. As the source for address information RSAG supports service negotiation and provisioning.	BST	X	X			Once a block has been donated but not allocated, PSIMS will reflect that the block is DONATED. RSAG would need to be able to accept the BDI of DONATED
SNECS	Provides switch access for TAFI system.	BST				X	When seven digit numbers (NPANXXT) are populated in fields 17+ of the swdata files pulled from the MARCH systems, SNECS must populate its own lookup tables with those seven digit numbers.
SOCS	Service Order Communications System - The primary function of SOCS is the real-time routing of formatted service orders via QMS/BOSIP to physical printers, PC's and mini-computers to support the provisioning and completion of service orders. SOCS is responsible for the collection, storage, and distribution of service orders to all user departments, including the service order driven mechanized systems.	BST	X				New SOCS Completion notification to the LNP Gateway from SOCS. This is to allow order notification of Disconnect or Change orders that reflect RTNN with Outward Action coded CAT D USOC. Need to have new contract work the same way.

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
SONGS	Service Order Negotiation Generation System - SONGS supports the CONSUMER, Small Business, Complex Business and Public COUs. Specific input screens with data and /or prompts are provided to aid negotiation and input of all order types. An interface through the On-Line RSAG Interface for Order Negotiation (ORION) verifies address information with data from Regional Street Address Guide (RSAG). The Central Office Features File Interface (COFFI) and Application for Telephone Number Load, Administration and Selection (ATLAS) provide other required data.	BST	X				Negotiation system will always go to ORION to Determine and return the NPA NXX (NPA CO or TTA) of the Service Address. Need to format the Service Address NPA CO/TTA as a NPA NXX code set of the new FID TTRA.
TAFI	Trouble Analysis Facilitation Interface - TAFI is a "rules based" system that guides the user through a series of questions and instructions to resolve a customer's problem. These questions and instructions trigger the gathering of relevant data from the customer and the appropriate Legacy system(s).	BST				X	There will be a pooling FID (INVU NP) that will be made available in CRIS and SOCS to signify a pooling status on a TN. Also, the enhancement for CRIS and SOCS involving retrieving a true EXK value will allow TAFI to query the proper switch in a pooling situation for feature troubles and allow LMOS to find the line records for the TN. Today TAFI retrieves the EXK from CRIS and SOCS from the S&E section, to pass to SNECS for Predictor verifies and March Add/Delete.
VNS	Vendor Negotiation System	BST	X				VNS must recognize the following Number pooling FIDS and Code Sets: EXK, TTRA, and LRN
ISP	Installation Support Package - With ISP, Installation work items are automatically entered from the operating company (BST) service order network (SOCS) into the LMOS/WM for testing, dispatch, and completion.	Lucent		X			Change ISP to go straight to the Switching Indicator for routing of the order rather than initially looking at the Main NPANXX.

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R	Requirement
LMOS HOST	Loop Maintenance Operations System - Application system that maintains customer line information to support trouble processing.	Lucent				X	When we receive the flat file for received TN's, we will need to do sequence number checks and then select off the TN's and send them to the appropriate LMOS site and format the file as specified in the Lucent program specifications.
LMOS-FE	Loop Maintenance Operations System – Front End - Application used to enter status, track and test customer trouble reports & service orders. (POTS & Non-Designated)	Lucent				X	LMOS FE will be converted based on LUCENT guidelines for installation of the software release.
BAC (PBAC)	Pooling Block Administration Center - The Block Administration Center will be a new center whose functions are defined in the Number Pooling Service Mapping document.	NA		X			The BAC is responsible for the administration of all number issues related to number pooling.
LIST	On-line service order processing system, that provides data to DAS/C, CNA, EWP, & BAPCO & 63 products.	Non Ntwk Sys	X				If the service order negotiation systems do not automatically populate TTRA on the service order, make changes to all appropriate BITS tables to respond to NPA NXX-X.
DBAS II	The DBAS II system is used to update the BellSouth Line Information Database (LIDB). Inter-exchange carriers access interconnected BOC LIDBs to validate calling card numbers, bill to third numbers, and collect calls	Telcordia	X				
LEIS	Loop Engineering Information System - LEIS is an OSP Telcordia decision support system that supports planning, design and assignment.	Telcordia		X			
LIDB	Line Information Database - LIDB is a Network Element that provides calling card validation and billed number screening information for alternately billed calls. BellSouth, all other RBOCs, ITCs, and ICs access LIDB for calling card validation and billed number screening information.	Telcordia	X				

SYSTEM	DESCRIPTION	VENDOR	ORDERING	PROVISIONING	BILLING	M&R Requirement
MARCH	MARCH is a Telcordia developed memory administration system that translates line-related service order data into switch provisioning messages and automatically transmits the messages to targeted stored program control system switches.	Telcordia		X		
NSDB	Network and Services Database - NSDB is a Network database that is Telcordia-developed and - maintained. It stores customer and circuit data for special service, message, carrier, and enhanced non-designed services.	Telcordia		X		
PAWS	Provisioning Analyst Workstation – PAWS system will allow for a common integrated approach to multiple work center tasks. Initially, targeted for the LAC, CPC, NAC.	Telcordia		X		
SOAC	Service Order Analysis and Control - SOAC receives service orders from the service order processor. Parses the FIDs and USOCs, generates loop facility and central office assignment requests, send assigned order back to the SOP, and to other provisioning systems.	Telcordia		X		
SWITCH	Replacement system for COSMOS.	Telcordia		X		
WFA/C	The WFA-Control (WFA-C) is the work assignment and control administration part of the WFA product line. WFA-C manages and automates most of the work assignments required to install and repair Special, Carrier, Message, Non-Designed Circuits, and Business/Residential Lines (POTS LINES). WFA-C tracks activities of the entire circuit from Service Order to completion, from Trouble Report to closure and provides detailed Circuit Records and Circuit History.	Telcordia		X	X	
CNUM	Customer number / systems provides TN administration capabilities.	Telcordia		X		

	A	B	C	D	E	F	G	H	I	J	K
1	BellSouth Region										
2	Index Sheet										
3	Study Period: 2000 - 2006										
4											
5											
6											
7											
8											
9			**Sheet Name:**		**Description:**						
10			Index		Thousands Block Number Pooling - Regional						
11			Sum of CO Driven & Insensitive Costs w/o PV		Cost Summarized by CO Driven and Insensitive Costs						
12			Summary of Non - PV Costs		Summary of Costs by FRC						
13			Factors - Capital		Capital Inputs						
14			Factors - Expense		Expense Inputs						
15			Restated Inputs		Capital & Expense Inputs Combined						
16			WP Capital		Capital Cost Calculations						
17			WP Expense		Expense Calculations						
18			Savings		Savings Calculations						
19			Other Labor Costs		Translation and Project Management Calculations						
20			Translation Expenses		Calculation of translation Expenses						
21			SME Inputs		Capital & SoftCap3&5						
22											

	A	B	C
1	BellSouth Region		
2	Summary of C.O. Driven and Insensitive Costs without PV		
3	Study Period: 2000 - 2006		
4			
5			
6			non PV Costs
7	Item/Description	Source	
8			
9	C.O. Driven Costs	WP Capital L128:L130 + L380 + Translation Expenses L27	$26,020,109
10			
11	Volume Insensitive Costs	WP Capital L197:L199 + L266:268 + L325:327 + L356 + L404 + (WP Expense L27 - Translation Expenses L27)	$105,231,553
12			
13	Savings	Savings L91	$10,186,246
14			
15	TOTAL NP Costs	(Sum L9:L11) - L13	$121,065,416

	A	B	C
1	BellSouth Region		
2	non PV Cost Summary		
3	Study Period: 2000 - 2006		
4			
5			
6			
7	Item/Description	Source	
8			
9	377C NP Joint	WP Capital L128 + L197 + L266	$2,604,289
10	20C NP Joint	WP Capital L129 + L198 + L267	$40,258
11	10C NP Joint	WP Capital L130 + L199 + L268	$698,429
12			
13	530C/630C NP General Purpose Computer	WP Capital L325	$625,056
14	20C NP General Purpose Computer	WP Capital L326	$209,279
15	10C NP General Purpose Computer	WP Capital L327	$1,809,727
16			
17	10C NP BAC Building Work (non C.O.)	WP Capital L356	$285,670
18			
19	560C NP SoftCap3	WP Capital L380	$23,238,017
20			
21	460C NP SoftCap5	WP Capital L404	$54,485,719
22			
23	NP Expenses	WP Expense L27	$47,255,217
24			
25	Savings	Savings L91	$10,186,246
26			
27			
28			
29			
30			
31			
32			
33	TOTAL NP Costs - non PV	(Sum L9:L23) - L25	$121,065,416

BellSouth Region
Factors - Capital
Study Period 2000 - 2006

Item/Description			Amount						
Description	FRC	Source	2000	2001	2002	2003	2004	2005	2006
377C Joint Field Cost Allocation Factor		Network	0 101	0 101	0 101	0 101	0 101	0 101	0 101
377C Joint Labs Cost Allocation Factor		Network	0 031	0 031	0 031	0 031	0 031	0 031	0 031
Economic Life for 377C Capital	377C	Cost Matters	10						
Depreciation Factor for 377C Capital		Cost Matters	0 0986	0 0986	0 0986	0 0986	0 0986	0 0986	0 0986
Cost of Money Factor for 377C Capital		Cost Matters	0 0513	0 0513	0 0513	0 0513	0 0513	0 0513	0 0513
Income Tax Factor for 377C Capital		Cost Matters	0 0244	0 0244	0 0244	0 0244	0 0244	0 0244	0 0244
Plant Specific Factor for 377C Capital		Cost Matters	0 0249	0 0249	0 0249	0 0249	0 0249	0 0249	0 0249
Ad Valorem Factor for 377C Capital		Cost Matters	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093
NCSF Factor for 377C Capital		Cost Matters	0 0051	0 0051	0 0051	0 0051	0 0051	0 0051	0 0051
Land Factor for 377C Capital		Cost Matters	0 007	0 007	0 007	0 007	0 007	0 007	0 007
Building Factor for 377C Capital		Cost Matters	0 1376	0 1376	0 1376	0 1376	0 1376	0 1376	0 1376
Support Equipment & Power Factor for 377C Capital		Cost Matters	1 1079	1 1079	1 1079	1 1079	1 1079	1 1079	1 1079
Inflation Factor for 377C Capital		Cost Matters	1 0201	1 0201	1 0201	1 0201	1 0201	1 0201	1 0201
Telco Factor for 377C Capital		Cost Matters	1 1252	1 1252	1 1252	1 1252	1 1252	1 1252	1 1252
COM for Advancement		Cost Matters	11 25%	11 25%	11 25%	11 25%	11 25%	11 25%	11 25%
Years of Advancement		Network	1 792	1 375	0	0	0	0	0
Economic Life for 530C/630C Capital	530C/630C	Cost Matters	45						
Depreciation Factor for 530C/630C Capital		Cost Matters	0 2123	0 2123	0 2123	0 2123	0 2123	0 2123	0 2123
Cost of Money Factor for 530C/630C Capital		Cost Matters	0 0561	0 0561	0 0561	0 0561	0 0561	0 0561	0 0561
Income Tax Factor for 530C/630C Capital		Cost Matters	0 0266	0 0266	0 0266	0 0266	0 0266	0 0266	0 0266
Ad Valorem Factor for 530C/630C Capital		Cost Matters	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093
Land Factor for 530C/630C Capital		Cost Matters	0 0282	0 0282	0 0282	0 0282	0 0282	0 0282	0 0282
Building Factor for 530C/630C Capital		Cost Matters	0 5438	0 5438	0 5438	0 5438	0 5438	0 5438	0 5438
Economic Life for 10C Capital	10C	Cost Matters	45						
Depreciation Factor for 10C Capital		Cost Matters	0 021	0 021	0 021	0 021	0 021	0 021	0 021
Cost of Money Factor for 10C Capital		Cost Matters	0 0893	0 0893	0 0893	0 0893	0 0893	0 0893	0 0893
Income Tax Factor for 10C Capital		Cost Matters	0 0424	0 0424	0 0424	0 0424	0 0424	0 0424	0 0424
Plant Specific Factor for 10C Capital		Cost Matters	0 0521	0 0521	0 0521	0 0521	0 0521	0 0521	0 0521
Ad Valorem Factor for 10C Capital		Cost Matters	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093
Economic Life for SoftCap3	560C	Cost Matters	3						
Depreciation Factor for 560C Capital SoftCap3		Cost Matters	0 3333	0 3333	0 3333	0 3333	0 3333	0 3333	0 3333
Cost of Money Factor for 560C Capital SoftCap3		Cost Matters	0 0525	0 0525	0 0525	0 0525	0 0525	0 0525	0 0525
Income Tax Factor for 560C Capital SoftCap3		Cost Matters	0 0249	0 0249	0 0249	0 0249	0 0249	0 0249	0 0249
Ad Valorem Factor for 560C Capital SoftCap3		Cost Matters	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093
Economic Life for SoftCap5	460C	Cost Matters	5						
Depreciation Factor for 460C Capital SoftCap5		Cost Matters	0 2000	0 2000	0 2000	0 2000	0 2000	0 2000	0 2000
Cost of Money Factor for 460C Capital SoftCap5		Cost Matters	0 0484	0 0484	0 0484	0 0484	0 0484	0 0484	0 0484
Income Tax Factor for 460C Capital SoftCap5		Cost Matters	0 023	0 023	0 023	0 023	0 023	0 023	0 023
Ad Valorem Factor for 460C Capital SoftCap5		Cost Matters	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093
Economic Life for 20C Capital	20C	Cost Matters	98						
Depreciation Factor for 20C Capital		Cost Matters	0	0	0	0	0	0	0
Cost of Money Factor for 20C Capital		Cost Matters	0 1125	0 1125	0 1125	0 1125	0 1125	0 1125	0 1125
Income Tax Factor for 20C Capital		Cost Matters	0 0534	0 0534	0 0534	0 0534	0 0534	0 0534	0 0534
Plant Specific Factor for 20C Capital		Cost Matters	0	0	0	0	0	0	0
Ad Valorem Factor for 20C Capital		Cost Matters	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093	0 0093
Common Overhead Loading Factor		Cost Matters	0 0424	0 0424	0 0424	0 0424	0 0424	0 0424	0 0424
Shared Factor for 377C		Cost Matters	0 0131	0 0144	0 0144	0 0144	0 0144	0 0144	0 0144
Shared Factor for 20C		Cost Matters	0 0001	0 0001	0 0001	0 0001	0 0001	0 0001	0 0001